# Responses to CAMD/EMT Comments on the Operable Unit 6 Draft Final RFI/RI Report 9/95

# 1 Comment

Page 1-5, para 2 The 6,550 and the 6,150 acreage's should be checked with Steve Schiesswohl DOE, RFFO has transferred some of the property to the Wind Site

## Response

The text was changed to 6260 total acres and 5860 total acres in the buffer zone

## 2 Comment

Page 1-6, para 2, lines 9, 10 and 11 This discussion is confusing Is there a typo? 167 2 and 167 3 in OU7, 167 1 and 167 2 in OU7, or just 167 2 in OU7? Was 167 3 originally in OU6, removed to OU7, and then put back in OU6 and no longer in OU7? Why were these originally separated from OU6? What historical knowledge caused 167 3 (1?) to be retained?

#### Response

The locations for IHSSs167 2 and 167 3 were moved by the Historical Release Report and then administratively transferred to OU7. This occurred during the field investigation for OU6, after these IHSSs had already been sampled in their original locations. The existing files for these IHSSs contained a photograph of IHSS 167 3 showing evidence that the original location was likely used as a spray field. Based on this photograph, the OU6 Project Manager chose to retain the original location for IHSS 167 3 in the OU6 RFI/RI Report as the "former IHSS 167 3." The text was changed in Sections 1 and 2 to clarify this

# 3 Comment

Page 1-8, para 2 No The two ditches come on site as separate ditches and go to a diversion box. After that they are either Upper Church or McKay bypass canal

# Response

This section was removed from the report. It is unnecessary to include with the descriptions of IHSSs

## 4 Comment

Pages 1-8 through 1-11 This discussion jumps around it would be good to go through sequentially on the A and B Ponds (i.e. Historical through present or present through historical)

#### Response

Although this would improve the quality of the report, the information is presented in a readable manner and the effort necessary to revise this section would not add significant value

## 5 Comment

Page 1-9, para 1, sentence 2 The ponds are not maintained at 10 percent capacity They are filled, sampled, and discharged

#### Response

This sentence was removed

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#### 6 Comment

Page 1-9, para 3, lines 5-10 Spray evaporation is no longer performed on the Site A-I water is disposed of by natural evaporation or transferred to A-2 A-2 water is disposed of by natural evaporation or when necessary discharged to A-3 after sample

#### Response

The comment was incorporated into the text

# 7 Comment

Page 1-10 Should the B-1 hot spot be mentioned in this discussion?

#### Response

It is more appropriate to include a discussion in Section 2.2.2, Stage 3 as a separate paragraph. Text was added that describes the historical and physical nature and extent of contamination at the hot spot.

## 8 Comment

Page 1-10, Para 4, sentence 1 and 2 This should be used as lead sentences for paragraphs 1 and 2 on page 1-11

#### Response

The comment was incorporated into the text

## 9 Comment

Page 1-11, para 1 Some of this information has already been said in the above discussion

## Response

Paragraph 1 summarizes the present conditions The previous paragraphs under this section are historical

## 10 Comment

Page 1-11, para 2 The discussion of the release of Ponds B-5 and A-4 should be presented here

#### Response

The discussion of the A-4 and B-5 discharges is in Section 1 3 2 3. The purpose of this section is to present the sources for potential contamination within the surface water and sediment

# 11 Comment

Page 1-11, para 3, sentence 6 This sentence is a bit misleading as this pond is a flow-through pond

# Response

The sentence in question was modified to read, "Surface water exits the pond when the capacity of the pond is exceeded by the influent"

## 12 Comment

Page 1-11, para 4, sentence 4 The temporary trailers and the PA fence are "on or near" this IHSS but neither show up on the IHSS map

## Response

The text was modified to read "buildings" instead of "temporary trailers" Figure 1 3-3 will be adjusted to better delineate this IHSS in relation to the PA fence and the buildings

## 13 Comment

Page 1-12, para 4, sentence 4 Should be broken into 2 sentences Also add 1970 behind September

#### Response

The comment was incorporated into the text

# 14 Comment

Page 1-13, para 2, sentence 1 The Soil Dump Area is located "mostly" within the buffer zone

## Response

The comment was incorporated into the text

## 15 Comment

Page 1-13, para 3, line 5 100 feet east if Building is not near the Old Out Fall Area Do you mean west?

#### Response

The comment was incorporated into the text

# 16 Comment

Page 1-13, para 3, line 8 Contamination is unknown? Was no sampling performed?

#### Response

The asphalt and concrete debris was not sampled during the OU6 field investigation. The presence of these materials was minimal

## 17 Comment

Page 1-14, para 1, lines 1 and 4 The PA and the security area need to be defined The Triangle Area is located mostly within the security area

## Response

The words "security area" were replace with "PA" It is assumed that the reader understands the basic aspects of RFETS

## 18 Comment

Pages 1-14 through 1-16 This needs to be discussed sequentially. The first sentence of para 2 is present, the rest is all history

#### Response

The first sentence of the second paragraph was moved to the first paragraph

# 19 <u>Comment</u>

Page 1-14, para 2, line 16 How does high wind damage drums?

## Response

The source for this information is cited at the end of the paragraph. Interpretation of that document is beyond the scope of this report.

## 20 Comment

Page 1-15, para 1 How many drums were found to be leaking in 71 and 73?

## Response

The source for this information is cited at the end of the paragraph. Interpretation of that document is beyond the scope of this report.

# 21 Comment

Page 1-15, para 1 Why were leaking drums discovered in 71 and 73 if they were transferred in 71?

# Response

The only drums transferred in 1971 were the drums that were being stored at the time. This does not mean that they never added new drums to this area after the 1971 transfer.

## 22 Comment

Page 1-15, para 3, sentence 1 When? 1971?

#### Response

The date is 1971 and the text was revised to incorporate it

## 23 Comment

Page 1-15 para 3, sentence 6 Incomplete sentence "Eventual" vs "eventually"?

## Response

The sentence was rewritten to provide clarity

# 24 <u>Comment</u>

Page 1-15, para 4 What about the three times the leaking drums discovered is 1973? Should discuss

# Response

A paragraph covering each of the three occurrences was added to the text

# 25 <u>Comment</u>

Page 1-17, para 4 See comment from page I - 6

#### Response

See response to question 2

# 26 Comment

Page 1-18, para 1 See comment from page 1 - 6

#### Response

See response to question 2

# 27 Comment

Page 1-18, para 2, line 6 You discuss "the existing landfill pond", but it is labeled "The Present Landfill Pond" on the map

## Response

"Existing" is used as an adjective, not as part of the proper name

## 28 Comment

Page 1-24, bullet 5 Add "Provide data for future CMS/FS or NFA"

#### Response

Bullet added "Provide data for potential analysis of remedial alternatives"

## 29 Comment

Page 1-29 Antimony is also a COC?

# Response

Antimony is not a COC, it is a chemical of interest (COI) COIs are chemicals that could pose a health risk due to toxicity values, but are found in concentrations close to naturally occurring levels COIs are analyzed in the uncertainty portion of the Human Health Risk Assessment (J10 3)

## 30 Comment

Figures 1 3-4 through 1 3-7 What is the purpose of these blown up maps? They are not much better than the small scale maps. Figure 1 3-7 should show the temporary trailers

#### Response

These figures provide detail on the IHSS locations and the soil excavations in IHSS 165 that become difficult to discern on a smaller scale figure. All references to temporary trailers were removed

## 31 Comment

Figure 1 3-8 The area does not correspond with the new OU boundary shown on Figure 1 3-7

## Response

The IHSS boundary is incorrect, it actually extends up to the PA fence to the north. The map was corrected

# 32 <u>Comment</u>

Page 2-1, para 1, sentence 2 Hard to follow Use bullets or numbers to break out the sentence into distinct thoughts

#### Response

The referenced sentence was rewritten to add clarity

# 33 Comment

Page 2-6, para 5, line 3 Stated "drilled through fill material into undisturbed soil of bedrock" Hopefully they were above groundwater and no DNAPLs present to help deeper migration

#### Response

Sampling was carried out in accordance with the Work Plan and the appropriate SOPs

## 34 Comment

Page 2-6, para 5, sentence 3 Stated "VOC continuous" should be changed to "Continuous"

#### Response

The comment was incorporated into the text

## 35 Comment

Page 2-15, para 3, sentence 4 Start a new paragraph here Identification of seep locations should have been performed later in the spring

#### Response

## 36 Comment

Page 2-19, para 2, line 3 and Figures 2 2-2 through 2 2-12 There has been no previous discussion of Figure 2 2-2 (on page 2-26) when you mention Figures 2 2-3 through 2 2-12 (i.e., Figure 2 2-2 is out of order) Seems like you could put more than one or two ponds on one page and decrease the number of maps needed Figure 2 2-8 is a good example

## Response

Although this would improve the quality and readability of the report, the information is presented in a usable manner and the effort necessary to revise these figures would not add significant value

#### 37 Comment

Page 2-22, para 1, line 7 Do you mean "east" rather than "northeast"?

#### Response

The text was changed to read "east" rather than "northeast"

#### 38 Comment

Page 2-23, para 2 Usually actual dates are presented on aerial photographs. These should be stated

## Response

The text shows the dates of the aenal photographs In many cases, the day of the month is not written on the photograph, only the month and the year

# 39 <u>Comment</u>

Page 2-23, para 4, line 9, Why was the seventh boring drilled so far away?

#### Response

The Work Plan requires this boring and the justification is found in the historical description of the IHSS

# 40 <u>Comment</u>

Page 2-24, para 5 So now there are 3 different boundaries of IHSS 143 1) historical, 2) HRR and 3) post Work Plan You need to put the "HRR IHSS Boundary" on the map legend, not just call it "IHSS Boundary"

#### Response

The boundary for IHSS 143 is confusing in this report Revisions made to the text and the figures containing IHSS 143 should add clarity See response to question number 12

## 41 Comment

Page 2-28, para 3, line I IHSS 165 is also outside the PA security fence

#### Response

The description now includes a reference to the portion of IHSS 165 outside of the PA

## 42 Comment

Page 2-28, para 5, line 1 Usually actual dates are presented on aerial photographs These should be stated

## Response

The dates presented in the text are the extent of the information known about the chosen photographs

# 43 <u>Comment</u>

Page 2-32, para 3, line 2 The trenches are located in the northwestern part of OU6

#### Response

The text was changed to read "northwestern" rather than "northern "

#### 44 Comment

Page 2-33, para 1-3 There is not a map showing the EM survey grids

#### Response

This information is referenced for Appendix B4 and is found there

#### 45 Comment

Page 2-35, para 2, Line 7 Why was the Pond Spray Field moved to OU7 ?

## Response

The HRR (June 1992) determined that the Pond Spray field, IHSS 167 2, was located in error. Aerial photographs and historical information located it north of the OU7 Landfill Pond.

# 46 Comment

Page 2-35, para 4, line 4 Usually actual dates are presented on aerial photographs These should be stated

## Response

See response to question number 42

## 47 Comment

Page 2-35, para 4 Again, there are 3 different boundaries of IHSS 167 3 I) historical, 2) HRR and 3) new post Work Plan You need to put the "HRR IHSS Boundary" on the map legend, not just call it "IHSS Boundary" Are the historical and post- Work Plan the same?

## Response

The representation of IHSS 167 3 should be clear Figure 2 2-21 shows the historical boundary, which is also in the Work Plan The historical location was retained within OU6 due to the aerial photograph from 1980 and 1983 Also see response to question number 2

## 48 Comment

Page 2-36, para 24 Much of this information is repeated and redundant within its section It is also poorly organized. All Stage 3 information should be in consistent order (i.e. Surface Soil, Soil Borings, Soil Profile Pit, Sediment and Surface Water Sampling)

## Response

This section was reorganized to provide clarity

#### 49 Comment

Page 2-37, para 4, sentence 1 This sentence is not clear Should read "one monitoring well will be installed downgradient of both the North and South Spray Fields"

## Response

The comment was incorporated into the text

## 50 Comment

Page 2-37, para 5, line 8 Start new paragraph here 76792 is "north" not "south" of IHSS 167 3

# Response

The comment was incorporated into the text

# 51 <u>Comment</u>

Page 2-39, Stage 3 All Stage 3 information should be in consistent order (i e Surface Soil, Soil Borings, Soil Profile ht, Sediment and Surface Water Sampling)

#### Response

The text was reorganized to provide clarity

#### 52 Comment

Page 2-39, para 6, line I Should be "from" not "form"

#### Response

The comment was incorporated into the text

## 53 Comment

Table 2 1-3 through 2 1-5 Extra blank pages

## Response

Reproduction problems were corrected

# 54 Comment

Figure 2 1-4 Are they designed with the water level below or above the top of the screen?

#### Response

Alluvial monitoring wells are designed with the water level within the screened interval, or above it

## 55 Comment

Figures 2 2-3 through 2 2-12 These should have consistent colors Figure 2 2-3 and 2 2- 11 need to have the effluent labeled in purple

## Response

Although this would improve the quality and readability of the report, the information is presented in a usable manner and the effort necessary to revise these figures would not add significant value

# 56 Comment

Figure 2 2-14 The monitoring well legend should be labeled in green to be consistent with the other maps

## Response

Although this would improve the quality and readability of the report, the information is presented in a usable manner and the effort necessary to revise this figure would not add significant value

## 57 Comment

Figure 2 2-20 The monitor well legend should be a solid circle rather than a square to be consistent with the other maps

#### Response

Although this would improve the quality and readability of the report, the information is presented in a usable manner and the effort necessary to revise this figure would not add significant value

# 58 Comment

Figure 2 2-21 The monitor well legend should be consistent (i.e. green and solid circle)

## Response

Although this would improve the quality and readability of the report, the information is presented in a usable manner and the effort necessary to revise this figure would not add significant value

# 59 Comment

Section 3 Pages 12, 14,15, 17, 18, 20, 22, 24, 26, 35 and 62 are missing Also not on draft paper like Sections 1 and 2

#### Response

Reproduction problems were corrected

## 60 Comment

Page 3-7, line 1 IHSS 141 is not in the PA and 165 is not all within the PA

#### Response

The text was changed to read "developed part" instead of PA

## 61 Comment

Page 3-13, line 1 The Arapahoe is not exposed in the valleys, only on the ridge top and side slopes

## Response

The text was adjusted according to the recommendation

## 62 Comment

Page 3-18, Landslides Landslides are a subset of the colluvial material

#### Response

The text discusses the possibility of bedrock involvement in the landslides, therefore it is included as a separate section in the text

# 63 Comment

Page 3-24 Discuss Arapahoe before the Laramie-Fox Hills Aquifer The Arapahoe is the first aquifer encountered

#### Response

The text was adjusted according to the recommendation

#### 64 Comment

Page 3-28, para 28, lines 5 – 6 Should read "The maximum observed saturated thickness of RFA in OU6,"

#### Response

The text was adjusted according to the recommendation

## 65 Comment

Page 3-38 para 1, line 1 Should read "proximity of the Coal Creek drainage to the north and west, and the Woman Creek"

#### Response

The text was adjusted according to the recommendation

## 66 Comment

Plates 3 5-2 and 3 5-3 The colors chosen for the Arapahoe, Laramie and Claystone/Siltstone should be consistent across the maps. There is a long outcrop of undifferentiated Lclst/sitst on Plate 3 5-2 northwest of Pond B-5 that is mapped as colluvium on the March 1995 map. Due to the different colors on the two plates, it appears as if it is mapped as Laramie on Plate 3 5-3. The legend should say "Top of Bedrock Contour and Elevation" not just "Bedrock Contour and Elevation".

#### Response

This question presents two issue First of all, the comment refers to a March 1995 map, which can not be found and was not provided in this report

Second, although a uniformity of color coding between plates and the legend "Top of Bedrock Contour and Elevation" would improve the readability of the report, the information is presented in a usable manner and the effort necessary to revise these plates would not add significant value for the cost required to make the changes

## 67 Comment

Plate 3 5-3 There is a large outcrop of Arapahoe Formation just north of A-3 on the "Geologic Units at Rocky Plats Environmental Technology Site" dated March 15, 1995 This does not show up at all on this plate dated April 1995. They were published at approximately the same time and should be fairly consistent. There are also outcrops of the Laramie Formation north of Ponds A-4 and B-5 on the March map that show up as artificial fill on the April map.

#### Response

Once again, the comment refers to a March 15, 1995 map that was not provided in this report

# 68 Comment

Section 4, Table of Contents, Groundwater Section 4 6 is on page 4-47 not 4-41 Whole TOC needs to be checked carefully

## Response

Table of Contents will be revised for Final RFI/RI Report

# 69 Comment

Page 4-2, line 1 Examples like "A more thorough history is presented in Section 1 3 2 of this report" really hurts the flow of this report. These statements are constantly interrupting the thoughts. This report would be a lot smaller if this was not done in every subsection. Maybe mention up front here and not put it throughout the whole section.

## Response

This particular reference to Section 1 3 2 will be retained in this section All other references to Section 1 3 2 will be deleted

#### 70 Comment

Page 4-2, para 3, line 4 "Discharges" should be changed to "effluent"

# Response

The comment was incorporated into the text

# 71 <u>Comment</u>

Page 4-3, line 1 Pond A-4 water is not routinely treated by GAC. The capability exists, but it has rarely if ever been used

## Response

The text was adjusted according to the recommendation

# 72 <u>Comment</u>

Page 4-3, para 2, line 7 Change "shoed" to "showed"

#### Response

The comment was incorporated into the text

## 73 Comment

Page 4-4, para 2, last sentence This sentence should read "When discharge from the pond into Walnut Creek is occurring, the effluent is sampled on a daily basis

#### Response

The comment was incorporated into the text

# 74 Comment

Page 4-6, para 2 Why two Trench Cs? Why not Trench D?

#### Response

The IAG and the Work Plan established the names for the IHSSs Two Trench Cs have caused no major difficulties

## 75 Comment

Page 4-6, para 4, line 2 "During" not "Curing"

## Response

The comment was incorporated into the text

### 76 Comment

Page 4-6, para 4, line 5 "location" not "located"

#### Response

The comment was incorporated into the text

# 77 Comment

Page 4-6, para 4, line 6 Same confusion as in comment Page 1-6, para 2, lines 9,10 and 11 Should this be 167 2?

#### Response

See response to question 2

## 78 Comment

Page 4-6, para 4, line 7 "location" not "located"

## Response

The comment was incorporated into the text

## 79 Comment

Page 4-9, para 4 This problem occurred during the French Drain Geotechnical Study of OU 1 Not sure how they resolved this problem. To my recollection, they though it may have been from a dust suppressant they were using while drilling. Should ask "old-timers" what was concluded then

## Response

Dust suppressant was not used during the OU6 field investigation. It is fairly certain within Environmental Restoration at RFETS that toluene is present in the epoxy found on black electrical tape. It has also become common knowledge within the environmental assessment and remediation industry.

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# 80 Comment

Page 4-15, para 3, line 2 "are" not "is"

#### Response

The comment was incorporated into the text

## 81 Comment

Page 4-16, para 4, line 2 See comment on Page 4-2, line 1

# Response

The cited text was removed

# 82 Comment

Page 4-17, last line See comment on Page 4-2, line 1

#### Response

The cited text was removed

#### 83 Comment

Page 4-19, lines 3-5 See comment on Page 4-2, line 1

## Response

The cited text was removed

#### 84 Comment

Page 4-20, para 3, line 3 See comment on Page 4-2, line 1 Lots of these through this section

## Response

The cited text was removed

#### 85 Comment

Page 4-47, para 2, last sentence Why? No contamination? Not characterized?

#### Response

The text was added, "The geochemistry and hydraulic properties of the UHSU and LHSU indicate that the interactions between the two units are minimal." The Work Plan did not contain any activities that would aid in the characterization of the LHSU

# 86 Comment

Page 4-48, para 2, lines 1-2 "Shown laboratory qualifiers and validation codes (Figure 4 4-1)" is written on each map. Why does it need to be rewritten here?

#### Response

The text was unnecessary and was deleted

# 87 Comment

Page 4-69, para 2, line 1-2 "Shown with laboratory qualifiers and validation codes (Figure 4 4-1)" is written on each map. Why does it need to be rewritten here?

## Response

The text was unnecessary and was deleted

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Page 13